

### Abstract of the Disclosure

A voltage-level converter and a method of converting a first logic voltage level to a second logic voltage level are described. In one embodiment, a voltage-level converter connects a first logic unit connected to a first supply voltage to a second logic unit  
5 connected to a second supply voltage. The voltage-level converter includes at least one transistor connected to the second supply voltage. The at least one transistor has a threshold voltage whose absolute value is greater-than-or-about-equal to the absolute value of the difference between the second supply voltage and the first supply voltage. In an alternative embodiment, a method for converting a first logic voltage level to a second  
10 logic voltage level includes transmitting a logic signal from a logic unit having an output voltage swing of between a first voltage level and a second voltage level, receiving the logic signal at a logic circuit having a pull-up transistor and an output voltage swing between a third voltage level and a fourth voltage level, and turning off the pull-up transistor when the logic signal has a value slightly greater than the difference between  
15 the third voltage level and the first voltage level.

"Express Mail" mailing label number: EL873859052US

Date of Deposit: December 7, 2001

This paper or fee is being deposited on the date indicated above with the United States Postal Service pursuant to 37 CFR 1.10, and is addressed to Box Patent Application, Assistant Commissioner for Patents, P.O. Box 2327, Arlington, VA 22202.